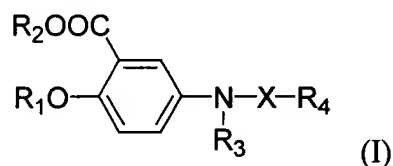


CLAIMS

What claimed is

1. A compound represented by the following formula (I):



Wherein,

R_1 is hydrogen, alkyl or alkanoyl;

R_2 is hydrogen or alkyl;

R_3 is hydrogen or an acetoxy group;

when R_3 is hydrogen, X is SO_2 or $(CH_2)_n$, and R_4 is a phenyl group which is unsubstituted or substituted with one or more of the group consisting of nitro, halogen, haloalkyl, and C_1 - C_5 alkoxy (wherein, n is an integer of 2 to 5, inclusive),

when R_3 is an acetoxy group, X is CO , SO_2 or $(CH_2)_n$, and R_4 is a phenyl group which is unsubstituted or substituted with one or more of the group consisting of nitro, halogen, haloalkyl, and C_1 - C_5 alkoxy; (wherein, n is an integer of 1 to 5, inclusive);

or a pharmaceutical-acceptable salt thereof.

2. A compound according to Claim 1, wherein

R_1 is hydrogen, C_1 - C_5 alkyl or C_2 - C_5 alkanoyl;

R_2 is hydrogen or C_1 - C_5 alkyl

R_3 is hydrogen or an acetoxy group;

when R₃ is hydrogen, X is SO₂ or (CH₂)_n, and R₄ is a phenyl group which is unsubstituted or substituted with one or more of the group consisting of nitro, halogen, haloalkyl, and C₁-C₅ alkoxy (wherein, n is an integer of 2 to 5, inclusive),

when R₃ is an acetoxy group, X is CO, SO₂ or (CH₂)_n, and R₄ is a phenyl group which is unsubstituted or substituted with one or more of the group consisting of nitro, halogen, haloalkyl, and C₁-C₅ alkoxy; (wherein, n is an integer of 1 to 5, inclusive);

or a pharmaceutical-acceptable salt thereof.

3. A compound according to Claim 1, wherein

R₁ is hydrogen, C₁-C₃ alkyl or C₂-C₃ alkanoyl;

R₂ is hydrogen or C₁-C₃ alkyl

R₃ is hydrogen or an acetoxy group;

when R₃ is hydrogen, X is SO₂ or (CH₂)_n, and R₄ is a phenyl group which is unsubstituted or substituted with one or more of the group consisting of nitro, halogen, haloalkyl, and C₁-C₅ alkoxy (wherein, n is an integer of 2 to 5, inclusive),

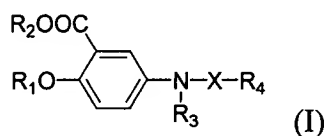
when R₃ is an acetoxy group, X is CO, SO₂ or (CH₂)_n, and R₄ is a phenyl group which is unsubstituted or substituted with one or more of the group consisting of nitro, halogen, haloalkyl, and C₁-C₅ alkoxy; (wherein, n is an integer of 1 to 5, inclusive);

or a pharmaceutically-acceptable salt thereof.

4. A compound according to Claim 1, which is one selected from the group consisting of

5-(4-nitrobenzyl)-*N*-acetylamino-2-hydroxy ethylbenzoate,
5-(4-nitrobenzyl)-*N*-acetylamino-2-acetoxy ethylbenzoate,
5-[2-(4-nitrophenyl)-ethyl]aminosalicylic acid, and
5-[3-(4-nitrophenyl)-*n*-propyl]aminosalicylic acid,
or a pharmaceutically-acceptable salt thereof.

5. A method for protecting central neurons from acute or chronic injuries to the central nervous system (CNS) caused by activation of NMDA glutamate receptors or by entry and accumulation of Zn^{2+} , or by free radicals comprising administering to a patient or a mammal suffering such CNS injuries a therapeutically appropriate amount of a neuroprotective compound represented by the following formula (I):



Wherein,

X is CO, SO₂ or (CH₂)_n (where n is an integer of 1 to 5, inclusive)

R₁ is hydrogen, alkyl or alkanoyl;

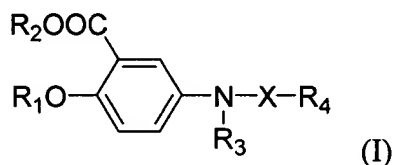
R₂ is hydrogen or alkyl;

R₃ is hydrogen or an acetoxy group; and

R₄ is a phenyl group which is unsubstituted or substituted with one or more of the group consisting of nitro, halogen, haloalkyl, and C₁-C₅ alkoxy; or a pharmaceutical-acceptable salt thereof.

8. A method according to Claim 5, wherein said compound attenuates NMDA neurotoxicity, Zn^{2+} neurotoxicity, and blocks free radical neurotoxicity as a direct antioxidant.

9. A composition for treating or preventing neurological diseases caused by activation of NMDA glutamate receptors, Zn^{2+} or oxidative stress, comprising administering to a patient or a mammal suffering from said neurological diseases a therapeutically effective amount of the compound represented by the following formula (I):



Wherein,

X is CO, SO₂ or (CH₂)_n (where n is an integer of 1 to 5, inclusive)

R₁ is hydrogen, alkyl or acanoyl;

R₂ is hydrogen or alkyl;

R₃ is hydrogen or an acetoxy group

R₄ is a phenyl group which is unsubstituted or substituted with one or more of the group consisting of nitro, halogen, haloalkyl, and C₁-C₅ alkoxy; or a pharmaceutical-acceptable salt thereof.

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